

Remarks

Claims 1-7, and 10-17 are pending, claims 8-9, and 18-20 having been previously canceled.

Claims 1-8 and 10-17 were rejected by the Examiner in the office action mailed June 16, 2006.

In that office action, claims 1-8, and 10-17 were rejected under 35 USC 103(a) as being unpatentable by Kubinsky, "Emulation of Ad-Hoc Networks on IEEE 802-11," in view of Chrysanthakopoulos (US Patent No. 6,968,307).

Claim 1 requires that the device "store multiple emulators, wherein each emulator contains instructions to emulate a particular operating environment having a particular *operating system*;" and, "store a data file containing elements necessary to execute *an emulated operating system* operating on a first computer..." Claims 11 and 15 have similar requirements.

In response to these arguments the Advisory Action stated, "The claim recites each emulator containing instructions to emulate a particular operating environment having a particular operating system. Therefore, the operating system is not emulated, the operating environment is emulated. The Examiner points to the Chrys reference which teaches an operating system (column 4, lines 11-12) as well as a particular operating system (Windows, column 2, line 52). Regarding the statement to Chrys, that "there's no emulation of an operating system" is non-persuasive because the claims don't require emulation of an operating system."

However, in the claims prior to amendment, claim 1, for example, clearly requires the device, "store multiple emulators," and "store a data file containing elements necessary to execute an *emulated operating system* operating on a first computer..." In order to further the progress of this case, however, Applicants have amended the claim to clearly require that the

multiple emulators each “contains instructions to emulate a particular operating environment having and a particular operating system...” This specification amply supports this amendment, such as on page 4.

The final statement of that paragraph of the Advisory Action (3rd paragraph, page 3) states, “The claim does not "emulate a particular operating environment" and "stores a data file containing elements necessary to execute an emulated operating system" nor performing emulation of an operating system.” Applicants are unsure of what the statement means as there appear to be some missing words.

Kubinsky discloses a method of emulating an ad-hoc network on the Berkeley network simulator (NS). The network simulator ‘is a powerful tool for examining a wide variety of *network protocols including TCP, routing protocols....*In this case, it is possible to examine *new protocols* with real data by just injecting the data to the simulator, or no emulator. (emphasis added).” See page 19.

Kubinsky is not directed to emulating operating environments and operating systems. Kubinsky is not directed to an environment where the operating system makes any difference, as it is directed to communications between computers on a network with regard to the network protocols, not the devices that use the network to communicate.

Chrys is directed to allowing a PC to emulate virtual devices that do not exist in the system, or that are busy, until the device becomes available. The devices use the IEEE-1394 bus protocol and its associated drivers to emulate other devices. There is no emulation of an operating system. In the comments, with regard to claim 9, the office action states that the emulation of other operating systems is ‘inherent’ because not all PCs use the same operating system.

First, the system disclosed in Chrys does not interact with the operating system. The IEEE-1394 bus protocols have the same external interface regardless of the operating system. This is what enables other devices that are 'talking' IEEE-1394 to interact without regard to the file formats. See Chrys, col. 6, lines 21-29. Indeed, when one PC wants to access a second PC, the second PC acts like the device. See col. 6, lines 57-59.

The Advisory Action states, "Applicants' statement that 'the IEEE-1394 bus protocols have the same external interface regardless of the operating system' is nonpersuasive since the claims are silent to this level of detail." Applicants' comment responded to the comment that 'interaction with other operating systems is inherent...' There is no need to emulate a different operating system in Chrys, because the Windows operating system in Chrys does not need to know anything about the operating system of the second PC, because they are both communicating via IEEE-1394, as far as the first PC is concerned, it 'sees' the second PC as another IEEE-1394 device and therefore there is no need to emulate another operating system.

Second, there is no discussion of emulation of other operating systems. The only operating system mentioned at all is Windows®. To assume that Chrys is universal to all operating systems is an impermissible extension of the disclosure of the prior art. The disclosure may easily be directed to devices that all use the same operating system, especially since the operating system is irrelevant to the operation of the disclosure of Chrys.

Third, the response to arguments states that the disclosure of a 'general purpose operating system' indicates that the emulations could occur in different operating systems. However, the term 'general purpose operating system' is not defined in Chrys. It is referenced in column 1, lines 40-42, but there is no definition that a 'general purpose operating' system would be an operating system that can run more than one operating system, such as Unix or Windows®. As

there is no mention of multiple operating systems, it would seem that the term ‘general purpose operating system’ just means any operating system that is running on a computer. For example, Windows® is a ‘general purpose operating system’ in that it performs all of the tasks of the various devices that are operating under it.

The Advisory Action states the lack of discussion in Chrys of emulation of other operating “is also non-persuasive since the claims are, verbatim, silent to emulation of other operating systems.” However, in the response, as well as below, Applicants have cited the language of the claims that require emulation or emulators of multiple operating systems.

Amended claim 1 requires, “*store multiple emulators, wherein each emulator contains instructions to emulate a particular operating environment and a particular operating system...*” It must be noted that the multiple emulator requirement existed prior to amendment.

Amended claim 11 requires, “transferring a data file containing necessary elements to emulate an operating system from a first computer having an operating system to be emulated to a memory device upon which reside *multiple emulators for multiple, different operating systems...*” Again it must be noted that the ‘multiple emulators’ requirement existed prior to amendment.

Finally, amended claim 15 requires, “connecting an emulation device to a host computer; *selecting an emulated operating system from multiple operating systems to be emulated;* executing the emulated operating system located on the emulation device on a processor of host computer having an original operating system.”

To be more explicit, Kubinsky and Chrys address emulation of *devices*, in one instance where there is a network through which the devices interact. Chrys addresses emulation of devices in an operating environment having a general purpose operating system, and Kubinsky

teaches emulation of devices over a network. The Advisory Action states, "Furthermore, applicants admitted that the Chrys reference does teach "addresses emulation of devices." However, emulation of devices is irrelevant to Applicants' invention as claimed.

Therefore the combination of references teaching emulations of devices, not operating systems teaches away from *emulation or emulators for emulating operating systems*.

No new matter has been added by this amendment. Allowance of all pending claims is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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